



MASONRY CONSTRUCTION FIELD SECTION 610

610.10 Rubble Masonry.

610.10.1 Scope. To establish procedures for inspecting and reporting stone, concrete blocks or broken concrete for use in rubble masonry. Portland cement concrete and mortar, if used, shall be inspected and reported in accordance with the applicable sections of this Manual and the Construction Manual.

610.10.2 Apparatus. Rule with suitable graduations to accurately measure the material to be inspected.

610.10.3 Procedure. The stone or broken concrete shall be visually inspected for size and quality. Concrete blocks shall be visually inspected for size and the inspector shall insure that acceptable portland cement concrete was used in the manufacture of the blocks. A sufficient number of individual pieces of rubble shall be measured to determine compliance with Specification Sec 610.12.

610.10.4 Report.

610.10.4.1 Stone and Broken Concrete. Stone and broken concrete shall be reported through SiteManager in accordance with [Automation Sec 3510](#) of this Manual. Under the remarks section the statement "Visual Inspection" shall be shown.

610.10.4.2 Concrete Blocks. Concrete blocks shall be reported through SiteManager in accordance with [Automation Sec AS-3510](#) of this manual. The report is to indicate acceptance, qualified acceptance, or rejection. Appropriate remarks, as described in [General Sec 7.1.2](#) of this Manual, are to be included in the report to clarify conditions of acceptance or rejection.

610.20 Brick Masonry.

610.20.1 Scope. To establish the procedures for inspecting, sampling, and reporting sewer brick for use in masonry construction. Mortar shall be inspected and reported in accordance with the applicable sections of this Manual.

610.20.2 Apparatus. Rule with suitable graduations to accurately measure the material to be inspected.

610.20.3 Procedure.

610.20.3.1 Field Inspection. The brick shall be visually inspected. Minor indentations and surface cracks incidental to the usual methods of manufacture, or the small chipping resulting from the customary methods of handling in shipment and delivery, should not be deemed grounds for rejection. Brick shall be of rectangular cross section with substantially straight edges and square corners. Kiln marks or depressions not exceeding 3/16 inch [5 mm] in depth shall be permitted on the backside of the brick. The size of the brick shall be specified by the contractor, selecting any of the standard sizes of building brick, unless otherwise specified in the contract. For any lot of sewer brick furnished, not more than 2 percent of the brick shall vary from the nominal size requirements specified by more than + 1/8 in. [3 mm] in either transverse dimension, or by more than 1 1/2 in. [35 mm] in length as specified in AASHTO M91. A sufficient number of individual brick shall be measured to determine specification compliance. Sewer brick shall have plain or smooth surfaces on both ends and on the face side. Manhole brick may have plain, slightly, or moderately textured surfaces.



610.20.3.2 Sampling. The inspector shall obtain specimens representative of the whole lot of brick from which they are selected and shall include specimens representative of the complete range of colors and sizes of the brick in the shipment. Five brick, for submitting to the Laboratory, shall be selected from each lot of 50,000 brick or fraction thereof. For lots of more than 500,000 brick, five individual brick shall be selected from each 100,000 brick or fraction thereof contained in the lot. In no case shall less than five brick be taken. Samples must be shipped to the Laboratory in such a manner that the specimens will not be chipped or broken.

610.20.3.3 Certifications. In certain cases it may be advisable to accept certifications from the supplier for the material in lieu of sampling and testing. Certifications shall be complete showing specific projects and compliance with the requirements of Specification Sec 610.22.1. If certifications are accepted on a regular basis from a producer, random sampling and testing shall be performed in accordance with this section to verify the certification.

610.20.4 Report. Sewer brick for masonry construction shall be reported through SiteManager in accordance with [Automation Section AS-3510](#) of this manual. The report is to indicate acceptance, qualified acceptance or rejection. Appropriate remarks, as described in [General Sec 7.1.2](#) of this Manual, are to be included in the report to clarify conditions of acceptance or rejection. If the material is accepted by certification the certification shall be noted on the report and retained in the district office.

